

## Chirp Waveform Decoding System

### ABSTRACT OF THE DISCLOSURE

Methods and apparatus for detecting a transmission of digital radio frequency chirps are disclosed. A series of digital chirps, which are emitted from a remote transmitter, are received by an antenna and then fed into an RF receiver. In one preferred embodiment of the invention, noise is extracted from the received RF chirp waveform using a Kalman filter. Useful information is then extracted from the received RF chirp waveform using one of several novel detection methods.